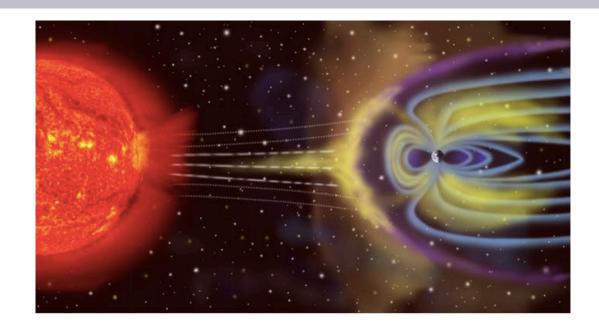
# Candidate Countermeasure against Bone Loss in Space



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### Radiation in Space

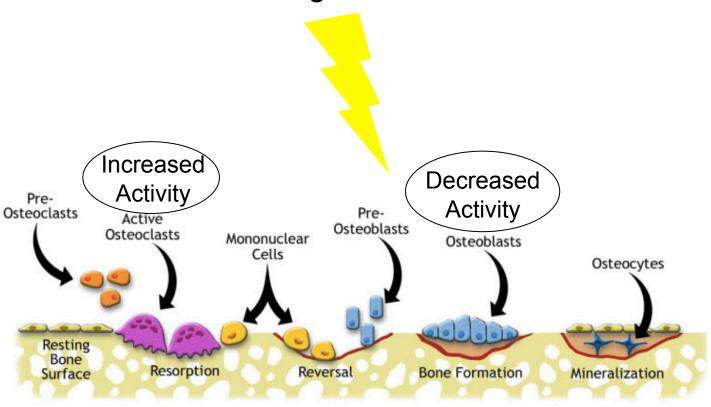


Solar particle events and galactic cosmic radiation

Reference: 1-2 Gy of whole body radiation over 1 year for astronauts

## Damaging Effects on Bone

#### **Ionizing Radiation**



...leads to loss of bone density

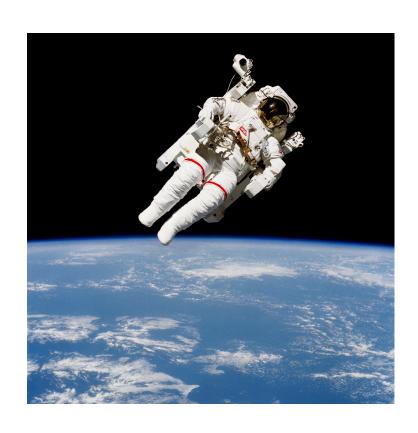
# Dried plum diet protects from bone loss caused by ionizing radiation

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Radio-protective effect -> Prevented bone loss caused by ionizing radiation

## Does dried plum only protect against radiation?



## Protection By Dried Plum

How is dried plum lending a protective effect?

What are the active components?

Does dried plum only protect bone?

Implications beyond astronaut health?